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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,197	05/11/2001	Atsushi Inagaki	1232-4714	5889

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EXAMINER
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MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

09/853,197

Applicant(s)

INAGAKI, ATSUSHI

Examiner

Justin P. Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 5, 7 - 12, and 14 - 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 7 - 12, and 14 - 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to Claims 1, 8, 15, and 17 have been considered but are moot in view of the new grounds of rejection.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1 – 3, 5, 8 – 10, 12, and 15 – 17** are rejected under 35 U.S.C. 102(e) as being anticipated by Misawa (US 6,700,607 B1).

The Examiner notes Claims 1 – 3 and 8 – 10 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

4. For **Claims 1 and 8**, Misawa discloses, as shown in figures 1 – 5, an image sensing apparatus, comprising:

an image sensor that outputs an image signal of a subject (28 – figure 5);

an image display device that displays an image based on said image signal obtained by said image sensor (“external image display apparatus” connected via output means 41; see column 9, lines 17 – 23);

a display designating unit (CPU 48 – figure 5) that determines whether or not said image display device (“external image display apparatus”) is in an image display ON state (“detector detects the connection ...”; see column 9, lines 31 and 32);

a focus evaluating value (“AF unit”) obtaining device that obtains a focus evaluating value for adjusting a focus based on said image signal obtained by said image sensor (see column 7, lines 35 – 42); and

a control unit (CPU 48 – figure 5) that adjusts the focus according to the focus evaluating value based on said image signal (see column 7, lines 26 – 34) read from image sensor (28) in reading manners (“normal image-capturing mode” and “macro image-capturing mode”; see column 7, lines 55 – 64 and column 8, lines 28 – 44) which are changed in according to the determination of said display designating unit (CPU 48) as to whether or not said image display device is in an image display ON state (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34).

5. For **Claim 15**, Misawa discloses, as shown in figures 1 – 5, a storage medium (CPU 48 – figure 5) in which a control program for controlling an image sensing apparatus is stored, wherein said control program comprising codes that, when executed, causes a computer to carry out the steps of an image sensing apparatus (see column 8, lines 26 – 34 and 43 – 50), comprising:

a code of an image sensing step that outputs an image signal of a subject (28 – figure 5);

a code of an image display step that displays an image based on said image signal obtained by said image sensor (“external image display apparatus” connected via output means 41; see column 9, lines 17 – 23);

a code of a display designating step (CPU 48 – figure 5) that determines whether or not said image display device (“external image display apparatus”) is in an image display ON state (“detector detects the connection ...”; see column 9, lines 31 and 32);

a code of a focus evaluating value (“AF unit”) obtaining step that obtains a focus evaluating value for adjusting a focus based on said image signal obtained by said image sensor (see column 7, lines 35 – 42); and

a code of a control step (CPU 48 – figure 5) that adjusts the focus according to the focus evaluating value based on said image signal (see column 7, lines 26 – 34) read from image sensor (28) in reading manners (“normal image-capturing mode” and “macro image-capturing mode”; see column 7, lines 55 – 64 and column 8, lines 28 – 44) which are changed in accordance to the determination of said display designating unit (CPU 48) as to whether or not said image display device is in an image display ON state (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34).

6. As for **Claims 2 and 9**, Misawa discloses, as shown in figures 1 – 5, wherein said reading manners include to read said image signal from a portion of said image sensor (see figures 3 and 4 for “normal image-capturing mode” and figures 1 and 2 for “macro image-capturing mode”), and the portion includes a focusing signed detecting area (see column 8, lines 13 – 19).

7. As for **Claims 3, 10, and 16**, Misawa discloses, as shown in figure 9, wherein said reading manners includes to read said image signal (“reading area”) from a display region (“display area”) of said image sensor (“imaging area”) when said display designating unit (CPU 48) determines that said image signal is displayed by said image display device while said image sensing apparatus photographs said image signal (see column 9, lines 47 – 51).

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8. As for **Claims 5 and 12**, Misawa discloses, as stated in column 9 (lines 31 and 32), that the detector (CPU 48) detects the connection to an external monitor (via Image Output 41). Furthermore, Misawa discloses, as shown in figure 5, that the image signal is passed to the external monitor (via Image Output 41) only after the Digital Signal Processing Part (34 – figure 5) has processed the image signal. Accordingly, the circuit arrangement inherently prohibits the image signal from being displayed on the external monitor prior to the completion of processing and when no connection to the external monitor exists. Furthermore, the Examiner considers “while image sensing apparatus photographs said sensed image signal” to correspond to the image signal’s passage through the entire circuit of figure 5 (i.e., from image capture to image display/storage).

Therefore, Misawa discloses a display prohibiting device (figure 5) that prohibits display of said image by said image display device (“external monitor”) at least until photographing processing is completed (Processing Part 34) if said display designating unit (CPU 48) determines that said image is displayed by said image display device while said image sensing apparatus photographs said sensed image signal.

9. For **Claim 17**, Misawa discloses, as shown in figures 1 – 5, an image sensing apparatus, comprising:

an image sensor (28 – figure 5);

a display configured to display images based on said image signal obtained by said image sensor (“external image display apparatus” connected via output means 41; see column 9, lines 17 – 23);

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a designation unit (CPU 48 – figure 5) configured to determine whether or not said display (“external image display apparatus”) is in an image display ON state (“detector detects the connection ...”; see column 9, lines 31 and 32);

a calculating unit (CPU 48) configured to calculate a focus evaluating value for focus adjustment based on said image signal (see column 7, lines 35 – 42);

wherein said calculation unit (CPU 48) calculates the focus evaluating value based on a portion of the image signal (see column 7, lines 26 – 34) when said display is in an image display OFF state (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34).

The Examiner considers the claimed “image display ON state” to correspond to a situation when Misawa detects connection to an external monitor (see column 9, lines 31 and 32). Accordingly, the Examiner considers the claimed “image display OFF state” to correspond to a situation when Misawa does not detect a connection the external monitor (see column 9, lines 31 and 32). When connected to the external monitor, Misawa places the image sensing apparatus in the “macro image-capturing mode” where  $\frac{1}{2}$  the pixels are read out (see figures 1 and 2) or all the pixels are readout. When not connected to the external monitor, Misawa place the image sensing apparatus in the “normal image-capturing mode” where  $\frac{1}{4}$  or  $\frac{1}{8}$  of the pixels readout (see figures 3 and 4). Clearly, when in an image display OFF state less pixels are readout than in an image display ON state.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 4, 7, 11, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa (US 6,700,607 B1).

The Examiner notes Claims 4/11 and 7/14 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

12. As for **Claims 4 and 11**, Misawa discloses, as stated in column 7 (lines 41 and 42), “a known focusing means such as an AF sensor may also be used”; but does not necessarily specify wherein said focus evaluating value is obtained based on a high frequency component of said image signal obtained by said image sensor, as claimed.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of obtaining a focus evaluating value based on a high frequency component of an image signal obtained by an image sensor are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have obtained said focus evaluating value based on a high frequency component of said image signal obtained by said image sensor for the advantage of *performing focusing based upon fine image detail and feature edges*.

13. As for **Claims 7 and 14**, Misawa controlling the image sensing apparatus by means of a CPU (48 – figure 5); although Misawa does not specifically disclose wherein determination by said display designating unit is stored in a memory as an image display flag.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of storing information regarding image sensing apparatus operations and conditions

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as flags in a memory are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have designation by said display designation unit/step is stored in a memory as an image display flag for the advantage of *providing a readily upgradeable method of operation.*

#### ***Cited Prior Art***

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure for the following reason(s):

**Hashimoto et al. (US 6,972,799 B1)** and **Tanaka et al. (US 6,130,420)** each disclose controlling the reading manners of the image sensor.

#### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vivek Srivastava can be reached on 571.272.7304. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM  
March 7, 2007



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